Patent Claims:

1. A method of estimating the pitch of a speech signal (2), said method comprising the steps of:

- dividing the speech signal into segments,
- calculating for each segment a conformity function for the signal, and
- detecting peaks in the conformity function,

characterized in that the method further comprises the steps of:

- estimating an average distance between said peaks, and
- using the estimate of said average distance as an estimate of the pitch.

2. A method according to claim 1, characterized in that it further comprises the steps of:

- sampling the speech signal to obtain a series of samples, and
- performing said division into segments such that each segment has a fixed number of consecutive samples.

3. A method according to claim 1 or 2, characterized in that it further comprises the steps of:

- estimating a set of filter parameters using linear predictive analysis (LPA),
- providing a modified signal (26) by filtering the speech signal through a filter based on said estimated set of filter parameters, and
- calculating said conformity function of the modified signal.

4. A method according to any one of claims 1 to 3, characterized in that said conformity function is calculated as an autocorrelation function.

5. A method according to any one of claims 1 to 4, characterized in that it further comprises the steps of:

- calculating for each peak in the conformity function the difference between the position of the peak and the estimate of said average distance, and
- providing an improved estimate of the pitch by selecting as the improved estimate the position of the peak having the smallest value of said difference.

6. A method according to claim 5, characterized in that it further comprises the step of:

- selecting, if the peak having the smallest value of said difference is represented by a number of samples, the sample having the maximum amplitude of said conformity function as said improved estimate of the pitch.

7. Use of the method according to any one of claims 1 to 6 in a mobile telephone.

8. A device adapted to estimate the pitch of a speech signal (2), and comprising:

- means (3) for dividing the speech signal into segments,
- means (5) for calculating for each segment a conformity function for the signal, and
- means (6) for detecting peaks in the conformity function,

characterized in that the device is further adapted to:

- estimate an average distance between said peaks, and

- use the estimate of said average distance as an estimate of the pitch.

9. A device according to claim 8, characterized in that it further comprises:

- means (3) for sampling the speech signal to obtain a series of samples, and
- means for performing said division into segments such that each segment has a fixed number of consecutive samples.

10. A device according to claim 8 or 9, characterized in that it further comprises:

- means (4; 24) for estimating a set of filter parameters using linear predictive analysis (LPA),
- means (4; 25) for providing a modified signal by filtering the speech signal through a filter based on said estimated set of filter parameters, and
- means (5) for calculating said conformity function of the modified signal.

11. A device according to any one of claims 8 to 10, characterized in that said conformity function is an autocorrelation function.

12. A device according to any one of claims 8 to 11, characterized in that it further comprises:

- means for calculating for each peak in the conformity function the difference between the position of the peak and the estimate of said average distance, and
- means for providing an improved estimate of the pitch by selecting as the improved estimate the position of the peak having the smallest value of said difference.

13. A device according to claim 12, c h a r a c t e r - i z e d in that it is further adapted to select, if the peak having the smallest value of said difference is represented by a number of samples, the sample having the maximum amplitude of said conformity function as said improved estimate of the pitch.

14. A device according to any one of claims 8 to 13, c h a r a c t e r i z e d in that the device is a mobile telephone.

15. A device according to any one of claims 8 to 13, c h a r a c t e r i z e d in that the device is an integrated circuit.